The Journal of Infectious Diseases

Volume 175 • Number 1 *January 1997*

Major Articles

1 Influenza Vaccination of Health Care Workers in Long-Term-Care Hospitals Reduces the Mortality of Elderly Patients
J. Potter, D. J. Stott, M. A. Roberts, A. G. Elder, B. O'Donnell, P. V. Knight, and W. F. Carman

7 Transmission of Swine Influenza Virus to Humans after Exposure to Experimentally Infected Pigs
David E. Wentworth, Martha W. McGregor, Michael D. Macklin, Veronica Neumann, and Virginia S. Hinshaw

16 A Genetically Inactivated Herpes Simplex Virus Type 2 (HSV-2) Vaccine Provides Effective Protection against Primary and Recurrent HSV-2 Disease
M. E. G. Boursnell, C. Entwisle, D. Blakeley, C. Roberts, I. A. Duncan, S. E. Chisholm, G. M. Martin, R. Jennings, D. Ní Challanaín, I. Sobek, S. C. Inglis, and C. S. McLean

26 Patients Infected with the Same Hepatitis C Virus Strain Display Different Kinetics of the Isolate-Specific Antibody Response
Tobias Allander, Aster Beyene, Stefan H. Jacobson, Lena Grillner, and Mats A. A. Persson

32 Increase in $CD23^+$ B Cells in Infants with Bronchiolitis Is Accompanied by Appearance of IgE and IgG4 Antibodies Specific for Respiratory Syncytial Virus
Sabina Rabatić, Alenka Gagro, Renata Lokar-Kolbas, Vilka Kršulović-Hrešić, Zvonimir Vrtar, Therese Popow-Kraupp, Vladimir Draženović, and Gordana Mlinarić-Galinović

38 Antibody and Antibody-Dependent Cellular Cytotoxicity Responses against the *Bam*HI A Rightward Open-Reading Frame-1 Protein of Epstein-Barr Virus (EBV) in EBV-Associated Disorders
J. E. Tanner, M. X. Wei, C. Alfieri, A. Ahmad, P. Taylor, T. Ooka, and J. Menezes

47 Cytokine Pattern in Relation to Disease Progression in Human Immunodeficiency Virus–Infected Children
Soe Than, Rong Hu, Naoki Oyaizu, Joe Romano, Xue-ping Wang, Shahid Sheikh, and Savita Pahwa

57 Genital Shedding of Human Immunodeficiency Virus Type 1 DNA during Pregnancy: Association with Immunosuppression, Abnormal Cervical or Vaginal Discharge, and Severe Vitamin A Deficiency
Grace C. John, Ruth W. Nduati, Dorothy Mbori-Ngacha, Julie Overbaugh, Mary Welch, Barbra A. Richardson, Jeckoniah Ndinya-Achola, Job Bwayo, John Krieger, Francis Onyango, and Joan K. Kreiss

63 Vertical Transmission of Human Immunodeficiency Virus Type 1: Seroreactivity by Maternal Antibodies to the Carboxy Region of the gp41 Envelope Glycoprotein
Kenneth E. Ugen, Vasantha Srikantan, James J. Goedert, Robert P. Nelson, Jr., William V. Williams, and David B. Weiner

70 Importance of Genotypic and Phenotypic Tolerance in the Treatment of Experimental Endocarditis Due to *Streptococcus gordonii*
José M. Entenza, Isabelle Caldelari, Michel P. Glauser, Patrick Francioli, and Philippe Moreillon

77 Receptor Affinity Purification of a Lipid-Binding Adhesin from *Haemophilus influenzae*
Jason Busse, Evamarie Hartmann, and Clifford A. Lingwood

84 Primary Human Immune Response to *Neisseria meningitidis* Serogroup C in Interleukin-12–Treated Severe Combined Immunodeficient Mice Engrafted with Human Peripheral Blood Lymphocytes
M. A. Julie Westerink, Dennis W. Metzger, Wendy A. Hutchins, Angela R. Adkins, Patricia F. Holder, Lorna B. Pais, Linda L. Gheesling, and George M. Carlone

91 An OspA-Based DNA Vaccine Protects Mice against Infection with *Borrelia burgdorferi*
Catherine J. Luke, Kristin Carner, Xiaowu Liang, and Alan G. Barbour

98 Genetic Heterogeneity of *Borrelia burgdorferi* in the United States
D. A. Mathiesen, J. H. Oliver, Jr., C. P. Kolbert, E. D. Tullson, B. J. B. Johnson, G. L. Campbell, P. D. Mitchell, K. D. Reed, S. R. Telford III, J. F. Anderson, R. S. Lane, and D. H. Persing

108 Bactericidal/Permeability-Increasing Protein Release in Whole Blood Ex Vivo: Strong Induction by Lipopolysaccharide and Tumor Necrosis Factor-α
Mieke A. Dentener, Gaby J. M. Francot, Pieter S. Hiemstra, Anton T. J. Tool, Arthur J. Verhoeven, Peter Vandenabeele, and Wim A. Buurman

118 Antiinflammatory Cytokine Responses during Clinical Sepsis and Experimental Endotoxemia: Sequential Measurements of Plasma Soluble Interleukin (IL)-1 Receptor Type II, IL-10, and IL-13
Tom van der Poll, René de Waal Malefyt, Susette M. Coyle, and Stephen F. Lowry

123 Interaction with Autologous Platelets Multiplies Interleukin-1 and Tumor Necrosis Factor Production in Mononuclear Cells
Koichi Aiura, Burton D. Clark, Charles A. Dinarello, Nathan H. Margolis, Gilles Kaplanski, John F. Burke, Ronald G. Tompkins, and Jeffrey A. Gelfand

130 Nitrite Generation in Interleukin-4–Treated Human Macrophage Cultures Does Not Involve the Nitric Oxide Synthase Pathway
M. Schneemann, G. Schoedon, P. Linscheid, R. Walter, N. Blau, and A. Schaffner

136 Immune Responses Associated with Chronic Fatigue Syndrome: A Case-Control Study
Alison C. Mawle, Rosane Nisenbaum, James G. Dobbins, Howard E. Gary, Jr., John A. Stewart, Michele Reyes, Lea Steele, D. Scott Schmid, and William C. Reeves

142 Alteration of Interleukin 2 (IL-2) and Soluble IL-2 Receptor Secretion in the Sera and Urine of Patients with Rickettsial Boutonneuse Fever
Serafino Mansueto, Fortunato P. D'Ancona, Piero Colletti, Raimondo Graceffa, Francesco La Seta, Vincenzo Pecoraro, Giuseppe Gambino, Giuseppina Grillo, Giustina Vitale, Piera Richiusa, Pietro D'Agostino, and Enrico Cillari

146 Binding and Germination of *Aspergillus fumigatus* Conidia on Cultured A549 Pneumocytes
Del J. DeHart, David E. Agwu, Nancy C. Julian, and Ronald G. Washburn

151 The Influence of Antigen-Presenting Cell Type and Interferon-γ on Priming and Cytokine Secretion of *Leishmania major*–Specific T Cells
Anuraj H. Shankar and Richard G. Titus

158 High Levels of Parasite-Specific IgG1 Correlate with the Amicrofilaremic State in *Loa loa* Infection
Jean Paul Akue, Marcel Hommel, and Eileen Devaney

Concise Communications

164 The Association between Hepatitis C Virus Genotype and Human Immunodeficiency Virus Disease Progression in a Cohort of Hemophilic Men
Caroline A. Sabin, Paul Telfer, Andrew N. Phillips, Sanjay Bhagani, and Christine A. Lee

168 GB Virus C/Hepatitis G Virus Infection in Southern China
Rong-Rong Wu, Masashi Mizokami, Kun Cao, Tatsunori Nakano, Xian-Min Ge, Su-Seng Wang, Etsuro Orito, Ken-ichi Ohba, Motokazu Mukaide, Kazumasa Hikiji, Johnson Y. N. Lau, and Shiro Iino

172 Maternal Virus Load during Pregnancy and Mother-to-Child Transmission of Human Immunodeficiency Virus Type 1: The French Perinatal Cohort Studies
Marie Jeanne Mayaux, Elisabeth Dussaix, Jacques Isopet, Claire Rekacewicz, Laurent Mandelbrot, Nicole Ciraru-Vigneron, Marie Christine Allemon, Véronique Chambrin, Christine Katlama, Jean François Delfraissy, and Jacqueline Puel for the SEROGEST Cohort Group

176 Drug Sensitivity of Human Immunodeficiency Virus Type 1 Isolates after Ribavirin Therapy
Richard Bernier, Michel Tremblay, Christos Tsoukas, and Michel G. Bergeron

179 Cytomegalovirus gB Genotype Distribution Differs in Human Immunodeficiency Virus–Infected Patients and Immunocompromised Allograft Recipients
Lucy Rasmussen, Christina Hong, Donato Zipeto, Shannon Morris, Daniel Sherman, Sunwen Chou, Richard Miner, W. Lawrence Drew, Richard Wolitz, Anna Dowling, Ann Warford, and Thomas C. Merigan

184 Simian Immunodeficiency Virus–Inoculated Macaques Acquire *Mycobacterium avium* from Potable Water during AIDS
Keith G. Mansfield and Andrew A. Lackner

188 Polymorphisms within the Human Tumor Necrosis Factor-α Promoter Region in Human Immunodeficiency Virus Type 1–Seropositive Persons
Brigitta M. N. Brinkman, Ireneus P. M. Keet, Frank Miedema, Cor L. Verweij, and Michèl R. Klein

191 Circulating and Ex Vivo Production of Pyrogenic Cytokines and Interleukin-1 Receptor Antagonist in 123 Patients with Fever of Unknown Origin
Elisabeth M. H. A. de Kleijn, Joost P. H. Drenth, Gerard J. Pesman, Hans van Druten, Pierre N. M. Demacker, Jos W. M. van der Meer, and the Netherlands Fever of Unknown Origin Study Group

195 Diagnosis of Measles with an IgM Capture EIA: The Optimal Timing of Specimen Collection after Rash Onset
Rita F. Helfand, Janet L. Heath, Larry J. Anderson, Edmond F. Maes, Dalya Guris, and William J. Bellini

200 Induction of Immunologic Memory in Gambian Children by Vaccination in Infancy with a Group A plus Group C Meningococcal Polysaccharide–Protein Conjugate Vaccine
Amanda Leach, Patrick A. Twumasi, Samuel Kumah, Winston S. Banya, Shabbar Jaffar, Bruce D. Forrest, Dan M. Granoff, Daniel E. LiButti, George M. Carlone, Lorna B. Pais, Claire V. Broome, and Brian M. Greenwood

205 New Murine Model of Bronchopneumonia Due to Cell-Bound *Haemophilus influenzae*
Shuichi Miyazaki, Tetsuo Nunoya, Tetsuya Matsumoto, Kazuhiro Tateda, and Keizo Yamaguchi

210 Ultrastructural and Antigenic Characterization of a Granulocytic Ehrlichiosis Agent Directly Isolated and Stably Cultivated from a Patient in New York State
Yasuko Rikihisa, Ning Zhi, Gary P. Wormser, Bohai Wen, Harold W. Horowitz, and Karim E. Hechemy

214 Role of Macrophages in the Candidacidal Activity of Liposomal Amphotericin B
Reeta T. Mehta, Sourav Poddar, Mamta Kalidas, Ricardo Gomez-Flores, and Kim Dulski

218 Effect of *Lactobacillus reuteri* on Intestinal Resistance to *Cryptosporidium parvum* Infection in a Murine Model of Acquired Immunodeficiency Syndrome
John I. B. Alak, Bryan W. Wolf, Emmanuel G. Mdurvwa, Gliceria E. Pimentel-Smith, and Oyewole Adeyemo

222 Invasive Aspergillosis in Mice Immunosuppressed with Cyclosporin A, Tacrolimus (FK506), or Sirolimus (Rapamycin)
Kevin P. High and Ronald G. Washburn

226 Modulatory Potential of Iron Chelation Therapy on Nitric Oxide Formation in Cerebral Malaria
Günter Weiss, Philip E. Thuma, George Mabeza, Ernst R. Werner, Manfred Herold, and Victor R. Gordeuk

Correspondence

231 Appearance of Autologous Neutralizing Antibody Correlates with Reduction in Virus Load and Phenotype Switch during Primary Infection with Human Immunodeficiency Virus Type 1
Janet L. Lathey, R. Douglas Pratt, and Stephen A. Spector

232 Importance of Using Relapse Studies or Tests for Detection of Antibiotic Resistance before Considering that a Treatment for Multidrug-Resistant Enterococcal Experimental Endocarditis Is Effective
François Caron

233 Reply
Claudia M. Brandt, Mark Rouse, Natasha Laue, Charles W. Stratton, Walter R. Wilson, and James M. Steckelberg

234 **Notices**

235 **IDSA US Pfizer HIV/AIDS Training Programs**

Volume 175 • Number 2 *February 1997*

Tribute

Jay P. Sanford, M.D.

Perspective

237 Perspective: Validating Surrogate Markers—Are We Being Naive?
V. De Gruttola, T. Fleming, D. Y. Lin, and R. Coombs

Major Articles

247 Longitudinal Analysis of Quantitative Virologic Measures in Human Immunodeficiency Virus–Infected Subjects with ≥400 CD4 Lymphocytes: Implications for Applying Measurements to Individual Patients
William B. Paxton, Robert W. Coombs, M. Juliana McElrath, Michael C. Keefer, James Hughes, Faruk Sinangil, David Chernoff, Lisa Demeter, Barbara Williams, and Lawrence Corey for the National Institute of Allergy and Infectious Diseases AIDS Vaccine Evaluation Group

255 A Randomized Trial (ISS 902) of Didanosine versus Zidovudine in Previously Untreated Patients with Mildly Symptomatic Human Immunodeficiency Virus Infection
Marco Floridia, Stefano Vella, Angela C. Seeber, Carlo Tomino, Vincenzo Fragola, Liliana E. Weimer, Daniela Ricciardulli, Francesco Milazzo, Francesco M. Gritti, Francesco Mazzotta, Sergio Ranieri, Francesco Chiodo, Mauro Moroni, Antonietta Cargnel, Dante Bassetti, Valerio Giannini, Luisella Cremoni, Ercole Concia, Alessandro Sinicco, Giampiero Carosi, Francesco Alberici, and Ferdinando Dianzani

265 Mucosal Immune Responses in Four Distinct Compartments of Women Infected with Human Immunodeficiency Virus Type 1: A Comparison by Site and Correlation with Clinical Information
Andrew W. Artenstein, Thomas C. VanCott, Karl V. Sitz, Merlin L. Robb, Kenneth F. Wagner, Steven C. D. Veit, Abby F. Rogers, Robin P. Garner, John W. Byron, Paul R. Burnett, and Deborah L. Birx

272 Detection of Clonal T Cell Populations with Closely Related T Cell Receptor Junctional Sequences in Persons at High Risk for Human Immunodeficiency Virus (HIV) Infection and in Patients Acutely Infected with HIV
Alessandra Bettinardi, Luisa Imberti, Alessandra Sottini, Eugenia Quirós-Roldan, Massimo Puoti, Francesco Castelli, Gian Pietro Cadeo, Roberto Gorla, and Daniele Primi

283 Safety and Pharmacokinetics of Hyperimmune Anti–Human Immunodeficiency Virus (HIV) Immunoglobulin Administered to HIV-Infected Pregnant Women and Their Newborns
John S. Lambert, Lynne M. Mofenson, Courtney V. Fletcher, Jack Moye, Jr., E. Richard Stiehm, William A. Meyer III, George J. Nemo, Bonnie J. Mathieson, Geri Hirsch, Christine V. Sapan, Laurence M. Cummins, Eleanor Jimenez, Edward O'Neill, Andrea Kovacs, and Alice Stek for the Pediatric AIDS Clinical Trials Group Protocol 185 Pharmacokinetic Study Group

292 Proteosomes, Emulsomes, and Cholera Toxin B Improve Nasal Immunogenicity of Human Immunodeficiency Virus gp160 in Mice: Induction of Serum, Intestinal, Vaginal, and Lung IgA and IgG
George H. Lowell, Robert W. Kaminski, Thomas C. VanCott, Bonnie Slike, Kathryn Kersey, Eduardo Zawoznik, Lawrence Loomis-Price, Gale Smith, Robert R. Redfield, Shimon Amselem, and Deborah L. Birx

302 Utility of Urine and Leukocyte Cultures and Plasma DNA Polymerase Chain Reaction for Identification of AIDS Patients at Risk for Developing Human Cytomegalovirus Disease
Mika Shinkai, Samuel A. Bozzette, William Powderly, Peter Frame, and Stephen A. Spector

309 Murine Cytomegalovirus Replication in the Lungs of Athymic BALB/c Nude Mice
John D. Shanley, Roger S. Thrall, and Stephen J. Forman

316 Full or Partial Seroreversion in Patients Infected by Hepatitis C Virus
Jean-Jacques Lefrère, Sonia Guiramand, François Lefrère, Martine Mariotti, Pascale Aumont, Joelle Lerable, Jean-Claude Petit, Robert Girot, and Laurence Morand-Joubert

323 Rhinoviruses Induce Interleukin-8 mRNA and Protein Production in Human Monocytes
Sebastian L. Johnston, Alberto Papi, Marty M. Monick, and Gary W. Hunninghake

330 Heterotypic Protection following Oral Immunization with Live Heterologous Rotaviruses in a Mouse Model
Ningguo Feng, Phuoc T. Vo, Danna Chung, Thanh-Van P. Vo, Yasutaka Hoshino, and Harry B. Greenberg

342 Humoral and Cellular Immune Responses following Vaccination with Purified Recombinant Hemagglutinin from Influenza A (H3N2) Virus
Douglas C. Powers, Janet E. McElhaney, Oscar A. Florendo, Jr., Mary C. Manning, Craig M. Upshaw, David W. Bentley, and Bethanie E. Wilkinson

352 Adjuvant Activity of the Heat-Labile Enterotoxin from Enterotoxigenic *Escherichia coli* for Oral Administration of Inactivated Influenza Virus Vaccine
Jacqueline M. Katz, Xiuhua Lu, Sarah A. Young, and Judith C. Galphin

364 Preclinical Evaluation of a Novel Group B Meningococcal Conjugate Vaccine that Elicits Bactericidal Activity in both Mice and Nonhuman Primates
Peter C. Fusco, Francis Michon, Joseph Y. Tai, and M. S. Blake

373 Receptor Specificities of Variant Gal(α1-4)Gal–Binding PapG Adhesins of Uropathogenic *Escherichia coli* as Assessed by Hemagglutination Phenotypes
James R. Johnson, Jane L. Swanson, Teresa J. Barela, and Jennifer J. Brown

382 Epitope Repertoire of Human $CD4^+$ T Cells on Tetanus Toxin: Identification of Immunodominant Sequence Segments
Brenda M. Diethelm-Okita, Raghavanpillai Raju, David K. Okita, and Bianca M. Conti-Fine

392 Molecular Comparison of Group A Streptococci of T1M1 Serotype from Invasive and Noninvasive Infections in Finland
A. Muotiala, H. Seppälä, P. Huovinen, and J. Vuopio-Varkila

400 Immunization with Outer Surface Protein (Osp) A, but Not OspC, Provides Cross-Protection of Mice Challenged with North American Isolates of *Borrelia burgdorferi*
William Scott Probert, Melissa Crawford, Renante B. Cadiz, and Rance B. LeFebvre

406 Evidence for a Commensal, Symbiotic Relationship between *Gardnerella vaginalis* and *Prevotella bivia* Involving Ammonia: Potential Significance for Bacterial Vaginosis
Vivien Pybus and Andrew B. Onderdonk

414 Phospholipase Activity in *Cryptococcus neoformans:* A New Virulence Factor?
Sharon C. A. Chen, Michael Muller, Jin Zhong Zhou, Lesley C. Wright, and Tania C. Sorrell

421 Phagocytosis of Viable *Candida albicans* by Alveolar Macrophages: Lack of Opsonin Function of Surfactant Protein A
Simone Rosseau, Andreas Guenther, Werner Seeger, and Juergen Lohmeyer

Concise Communications

429 Bacterial Antigen Activation of Vδ1 and Vδ2 γδ T Cells of Persons Infected with Human Immunodeficiency Virus Type 1
Keith A. Chervenak, Michael M. Lederman, and W. Henry Boom

434 The Effect on Human Immunodeficiency Virus Type 1 RNA Levels in Cerebrospinal Fluid after Initiation of Zidovudine or Didanosine
Magnus Gisslén, Gunnar Norkrans, Bo Svennerholm, and Lars Hagberg

438 Human T Cell Lymphotropic Virus Type I Does Not Increase Human Immunodeficiency Virus Viral Load In Vivo
Lee H. Harrison, Thomas C. Quinn, and Mauro Schechter

441 Inactivated Poliovirus Vaccine Protects Transgenic Poliovirus Receptor Mice against Type 3 Poliovirus Challenge
Rolf E. Taffs, Yelena V. Chernokhvostova, Eugenia M. Dragunsky, Tatsuji Nomura, Kyoji Hioki, E. Coen Beuvery, Edward A. Fitzgerald, Inessa S. Levenbook, and David M. Asher

444 Dose Titration Study of Live Attenuated Varicella Vaccine in Healthy Children
Edward P. Rothstein, Henry H. Bernstein, Pennridge Pediatric Associates, Angela L. Ngai, Iksung Cho, C. Jo White

448 Distribution of Infecting Hepatitis C Virus Genotypes in End-Stage Liver Disease Patients at a Large American Transplantation Center
Hugo E. Vargas, Lian-Fu Wang, Tomasz Laskus, Anthony Poutous, Randall Lee, Anthony Demetris, Forrest Dodson, Adrian Casavilla, John Fung, Timothy Gayowski, Nina Singh, Ignazio Marino, and Jorge Rakela

450 High Prevalence of GB Virus C/Hepatitis G Virus in Healthy Persons in Ho Chi Minh City, Vietnam
Kevin E. Brown, Susan Wong, Mat Buu, Tran V. Binh, Tran V. Be, and Neal S. Young

454 Molecular Investigation of GB Virus C Infection in Hemophiliacs in Japan
Tadatoshi Kinoshita, Kazuhiko Miyake, Haruhisa Nakao, Takeshi Tanaka, Fumio Tsuda, Hiroaki Okamoto, Yuzo Miyakawa, and Makoto Mayumi

458 An ELISA for Detection of Antibodies to the E2 Protein of GB Virus C
Bruce J. Dille, Teresa K. Surowy, Robin A. Gutierrez, Paul F. Coleman, Mark F. Knigge, Robert J. Carrick, Richard D. Aach, F. Blaine Hollinger, Cladd E. Stevens, Luiz H. Barbosa, George J. Nemo, James W. Mosley, George J. Dawson, and Isa K. Mushahwar

462 Treatment of Experimental Methicillin-Resistant *Staphylococcus epidermidis* Endophthalmitis with Intravitreal Vancomycin and Intravitreal Dexamethasone
Miriam A. Smith, John A. Sorenson, Gerard D'Aversa, Sid Mandelbaum, Ira Udell, and Winston Harrison

466 Cross-Reactivity to *Borrelia burgdorferi* Proteins in Serum Samples from Residents of a Tropical Country Nonendemic for Lyme Disease
Thomas R. Burkot, Martin E. Schriefer, and Sandra A. Larsen

470 Clinical Isolates of *Shigella* Species Induce Apoptosis in Macrophages
Andrea Guichon and Arturo Zychlinsky

474 Interleukin-8 and Chemotactic Activity of Middle Ear Effusions
Merete Storgaard, Knud Larsen, Susanne Blegvad, Hanne Nødgaard, Therese Ovesen, Paul Lehm Andersen, and Niels Obel

478 Differential Production of and Migratory Response to β Chemokines by Human Microglia and Astrocytes
Phillip K. Peterson, Shuxian Hu, Janeen Salak-Johnson, Thomas W. Molitor, and Chun C. Chao

482 Dihydropteroate Synthase Polymorphisms in *Pneumocystis carinii*
Brian R. Lane, Jennifer C. Ast, Paul A. Hossler, David P. Mindell, Marilyn S. Bartlett, James W. Smith, and Steven R. Meshnick

486 Serologic Evolution of Neurocysticercosis Patients after Antiparasitic Therapy
Hector H. Garcia, Robert H. Gilman, Manuel Catacora, Manuela Verastegui, Armando E. Gonzalez, Victor C. W. Tsang, and the Cysticercosis Working Group in Peru

489 Reduction of *Wuchereria bancrofti* Adult Worm Circulating Antigen after Annual Treatments of Diethylcarbamazine Combined with Ivermectin in French Polynesia
Luc Nicolas, Catherine Plichart, Lam N. Nguyen, and Jean-Paul Moulia-Pelat

Correspondence

493 IgG4 and IgE Responses to *Schistosoma mansoni* Adult Worms after Treatment
M. Webster, P. G. Fallon. A. J. C. Fulford, A. E. Butterworth, J. H. Ouma, G. Kimani, and D. W. Dunne

494 Reply
Maria Yazdanbakhsh, Govert van Dam, and Jane Grogan

494 **Notices**

495 **Instructions for Authors**

Volume 175 • Supplement 1 *February 1997*

Global Poliomyelitis Eradication Initiative: Status Report

S1 Commentary: The Unfolding Story of Global Poliomyelitis Eradication
Stephen L. Cochi, Harry F. Hull, Roland W. Sutter, Catherine M. Wilfert, and Samuel L. Katz

Current Status of Poliomyelitis

S4 Progress toward Global Polio Eradication
Harry F. Hull, Maureen E. Birmingham, Bjorn Melgaard, and Jong Wook Lee

S10 Overview of Poliomyelitis in the African Region and Current Regional Plan of Action
Jean-Marie Okwo-Bele, Andrei Lobanov, Robin J. Biellik, Maureen E. Birmingham, Lionel Pierre, Oyewale Tomori, and Deogratias Barakamfitiye

S16 Status of Polio Eradication in the Seven Countries of the Eastern Africa Epidemiological Block
Douglas N. Klaucke, Andrei Lobanov, Jean-Marie Okwo-Bele, and Deogratias Barakamfitiye

S20 Current Status of Polio Eradication in Southern Africa
Robin J. Biellik

S24 Poliomyelitis in Angola: Current Status and Implications for Poliovirus Eradication in Southern Africa
Hector S. Izurieta, Robin J. Biellik, Olen M. Kew, Fatima L. Valente, Claudia Chezzi, and Roland W. Sutter

S30 Polio Outbreaks in Namibia, 1993–1995: Lessons Learned
Robin J. Biellik, Tina Allies, Celia J. I. Woodfill, and Andrei Lobanov

S37 Eradication of Wild Poliovirus from the Americas: Acute Flaccid Paralysis Surveillance, 1988–1995
Ciro A. de Quadros, Bradley S. Hersh, Jean-Marc Olivé, Jon K. Andrus, Claudio M. da Silveira, and Peter A. Carrasco

S43 Eradication of Wild Poliovirus from the Americas: Wild Poliovirus Surveillance—Laboratory Issues
Francisco P. Pinheiro, Olen M. Kew, Milford H. Hatch, Claudio M. da Silveira, and Ciro A. de Quadros

S50 Progress toward Poliomyelitis Eradication in the Eastern Mediterranean Region of the World Health Organization
M. H. Wahdan, R. Aslanian, M. R. Reichler, and M. T. Gaafar

S56 The Eradication of Poliomyelitis in Egypt: Critical Factors Affecting Progress to Date
R. Bruce Aylward, Esmat Mansour, El Said Aly Oon, Ahmed Haridi, Abdulla Abu El Kheir, and Atef Hassan

S62 Outbreak of Paralytic Poliomyelitis in a Highly Immunized Population in Jordan
Mary R. Reichler, Adnan Abbas, Sa'ad Kharabsheh, Azmi Mahafzah, James P. Alexander, Jr., Philip Rhodes, Samir Faouri, Haider Otoum, Samir Bloch, Mazen Abdel Majid, Mick Mulders, Rafi Aslanian, Harry F. Hull, Mark A. Pallansch, and Peter A. Patriarca

S71 Outbreak of Poliomyelitis in Gizan, Saudi Arabia: Cocirculation of Wild Type 1 Polioviruses from Three Separate Origins
Huda Afif, Roland W. Sutter, Olen M. Kew, Robert E. Fontaine, Mark A. Pallansch, Mahesh K. Goyal, and Stephen L. Cochi

S76 Status of Poliomyelitis Eradication in Europe and the Central Asian Republics of the Former Soviet Union
George Oblapenko and Roland W. Sutter

S82 A Large Outbreak of Poliomyelitis following Temporary Cessation of Vaccination in Samarkand, Uzbekistan, 1993–1994
Roland W. Sutter, Yakubjan K. Chudaiberdiev, Sadullo H. Vaphakulov, Dilorom Tursunova, George Oblapenko, and Tulkin I. Iskandarov

S86 Unimmunized Gypsy Populations and Implications for the Eradication of Poliomyelitis in Europe
R. Bruce Aylward, Daniela Porta, Lucia Fiore, Barbara Ridolfi, Patrizia Chierchini, and Francesco Forastiere

S89 Polio Eradication in the World Health Organization South-East Asia Region by the Year 2000: Midway Assessment of Progress and Future Challenges
Jon K. Andrus, Kaushik Banerjee, Barbara P. Hull, Jean Clare Smith, and Imam Mochny

S97 Poliomyelitis Eradication in the Western Pacific Region
Rudolf H. Tangermann, Julian Bilous, Christopher Maher, R. Bruce Aylward, Alan Schnur, Yoshikuni Sato, and Shigeru Omi

S105 Status of the Eradication of Indigenous Wild Poliomyelitis in the People's Republic of China
Wang Ke-an, Zhang Li-bi, Mac W. Otten, Jr., Zhang Xing-lu, Yasuo Chiba, Zhang Rong-zhen, Xu Tao, Liu Xia, Liu Mu, Li Qian-Le, Yu Jing-jin, and Wang Zhao

Epidemiologic and Virologic Surveillance Issues

S113 Poliovirus Surveillance: Building the Global Polio Laboratory Network
Barbara P. Hull and Walter R. Dowdle

S117 Development and Coordination of the Polio Laboratory Network in the Western Pacific Region of the World Health Organization
Ray Sanders, Christopher Maher, R. Bruce Aylward, Julian Bilous, Alan Schnur, Yoshikuni Sato, Shigeru Omi, and Rudolf H. Tangermann

S122 Surveillance for Polio Eradication in the People's Republic of China
Zhang Jian, Zhang Li-bi, Mac W. Otten, Jr., Jiang Tao, Zhang Xing-lu, Zhang Rong-zhen, and Wang Ke-an

S135 A Theoretical Framework for Evaluating the Sensitivity of Surveillance for Detecting Wild Poliovirus: I. Factors Affecting Detection Sensitivity in a Person with Acute Flaccid Paralysis
Howard E. Gary, Jr., Ray Sanders, and Mark A. Pallansch

S141 A Theoretical Framework for Evaluating the Sensitivity of Surveillance for Detecting Wild Poliovirus: II. Factors Affecting Detection Sensitivity in a Population with Circulating Wild Poliovirus
Howard E. Gary, Jr., Ray Sanders, and Mark A. Pallansch

S146 Poliomyelitis Surveillance: The Compass for Eradication
Maureen E. Birmingham, Robert W. Linkins, Barbara P. Hull, and Harry F. Hull

S151 Assessment of Guillain-Barré Syndrome Mortality and Morbidity in the United States: Implications for Acute Flaccid Paralysis Surveillance
D. Rebecca Prevots and Roland W. Sutter

S156 Polio Eradication: Surveillance Implications for the United Kingdom
D. M. Salisbury, M. E. Ramsay, J. M. White, and D. W. Brown

S160 Epidemiologic Study of Guillain-Barré Syndrome in Children <15 Years of Age in Latin America
Jean-Marc Olivé, Carlos Castillo, Rafael Garcia Castro, and Ciro A. de Quadros

S165 Outbreaks of Paralytic Poliomyelitis, 1976–1995
Peter A. Patriarca, Roland W. Sutter, and Paul M. Oostvogel

S173 Establishing Acute Flaccid Paralysis Surveillance under Difficult Circumstances: Lessons Learned in Cambodia
Ly Nareth, R. Bruce Aylward, Oum Sopal, Dave Bassett, Mean Chi Vun, and Julian Bilous

S176 Duration of Poliovirus Excretion and Its Implications for Acute Flaccid Paralysis Surveillance: A Review of the Literature
James P. Alexander, Jr., Howard E. Gary, Jr., and Mark A. Pallansch

Strategies for Eradication: Experience and Current Research

S183 National Immunization Days: State of the Art
Maureen E. Birmingham, R. Bruce Aylward, Stephen L. Cochi, and Harry F. Hull

S189 National Immunization Days: Experience in Latin America
Jean-Marc Olivé, Joao Baptista Risi, Jr., and Ciro A. de Quadros

S194 The Experience of Countries in the Western Pacific Region in Conducting National Immunization Days for Poliomyelitis Eradication
Julian Bilous, Christopher Maher, Rudolf H. Tangermann, R. Bruce Aylward, Alan Schnur, Ray Sanders, Yoshikuni Sato, and Shigeru Omi

S198 Increased Immunogenicity of Oral Poliovirus Vaccine Administered in Mass Vaccination Campaigns Compared with the Routine Vaccination Program in Jordan
Mary R. Reichler, Sa'ad Kharabsheh, Philip Rhodes, Haider Otoum, Samir Bloch, Mazen Abdel Majid, Mark A. Pallansch, Peter A. Patriarca, and Stephen L. Cochi

S205 Evaluation of Oral Poliovirus Vaccine Delivery during the 1994 National Immunization Days in Pakistan
M. R. Reichler, R. Aslanian, Z. H. Lodhi, I. Latif, M. Alam Khan, R. Chaudhry, A. A. Idris, and M. A. Barzgar

S210 Effect of Target Age of Supplemental Immunization Campaigns on Poliomyelitis Occurrence in China
Zhang Jian, Yu Jing-jin, Robert W. Linkins, Zhang Rong-zhen, Wang Ke-an, and Stephen L. Cochi

Poliovirus Vaccines

S215 Combined Immunization of Infants with Oral and Inactivated Poliovirus Vaccines: Results of a Randomized Trial in The Gambia, Oman, and Thailand
WHO Collaborative Study Group on Oral and Inactivated Poliovirus Vaccines

S228 Humoral and Mucosal Immunity in Infants Induced by Three Sequential Inactivated Poliovirus Vaccine–Live Attenuated Oral Poliovirus Vaccine Immunization Schedules
John F. Modlin, Neal A. Halsey, Mary Lou Thoms, Carlton K. Meschievitz, Peter A. Patriarca, and the Baltimore Area Polio Vaccine Study Group

S235 Sequential Use of Inactivated Poliovirus Vaccine followed by Oral Poliovirus Vaccine in Oman
Roland W. Sutter, Ali Jaffer M. Suleiman, Pradeep G. Malankar, Firdosi R. Mehta, Mahmud A. Medany, Mohammed Amir M. Arif, Robert W. Linkins, Mark A. Pallansch, Mussalam S. El-Bualy, and Susan E. Robertson

S241 Sequential and Combined Use of Inactivated and Oral Poliovirus Vaccines: Dolj District, Romania, 1992–1994
Nicolae Ion-Nedelcu, Peter M. Strebel, Floares Toma, Sanda Biberi-Moroeanu, Mariana Combiescu, Ana Persu, Andre Aubert-Combiescu, Stanley A. Plotkin, and Roland W. Sutter

S247 Development of a More Thermostable Poliovirus Vaccine
Julie B. Milstien, Stanley M. Lemon, and Peter F. Wright

S254 The Clinical Efficacy of Trivalent Oral Polio Vaccine in The Gambia by Season of Vaccine Administration
M. S. Deming, R. W. Linkins, K. O. Jaiteh, and H. F. Hull

S258 The Effect of Diarrhea on Oral Poliovirus Vaccine Failure in Brazil
Drew L. Posey, Robert W. Linkins, M. J. Couto Oliveria, Domicina Monteiro, and Peter A. Patriarca

S264 Comparison of a Monoclonal Antibody–Based IgM Capture ELISA with a Neutralization Assay for Assessing Response to Trivalent Oral Poliovirus Vaccine
Howard E. Gary, Jr., Charlotte Freeman, Silvia Peñaranda, Kaija Maher, Larry Anderson, and Mark A. Pallansch

Impact of the Polio Eradication Initiative on Strengthening the Expanded Programme on Immunization and Primary Health: Case Studies

S268 Strengthening Routine Immunization Services in the Western Pacific through the Eradication of Poliomyelitis
R. Bruce Aylward, Julian Bilous, Rudolf H. Tangermann, Ray Sanders, Christopher Maher, Yoshikuni Sato, and Shigeru Omi

S272 Poliomyelitis Eradication and Its Impact on Primary Health Care in the Philippines
Rudolf H. Tangermann, Maritel Costales, and Juan Flavier

S277 Integrated Disease Control Initiatives: Polio Eradication and Neonatal Tetanus Elimination in Egypt
Esmat Mansour, R. Bruce Aylward, and Frank Cummings

Global Certification of Polio Eradication: How to Get There and How to Stop

S281 Certification of the Eradication of Indigenous Transmission of Wild Poliovirus in the Americas
Frederick C. Robbins and Ciro A. de Quadros

S286 The Biologic Principles of Poliovirus Eradication
Walter R. Dowdle and Maureen E. Birmingham

Volume 175 • Number 3 *March 1997*

Major Articles

497 Respiratory Syncytial Virus Induces Selective Production of the Chemokine RANTES by Upper Airway Epithelial Cells
Tadahito Saito, Ronald W. Deskin, Antonella Casola, Helene Häeberle, Barbara Olszewska, Peter B. Ernst, Rafeul Alam, Pearay L. Ogra, and Roberto Garofalo

505 Humoral Immune Response to the Hypervariable Region of Hepatitis C Virus Differs between Genotypes 1b and 2a
Kentaro Yoshioka, Toshiyuki Aiyama, Akihiko Okumura, Masahiro Takayanagi, Kazuo Iwata, Tetsuya Ishikawa, Yoshiyuki Nagai, and Shinichi Kakumu

511 Infectivity and Pathogenicity in Chimpanzees of a Surface Gene Mutant of Hepatitis B Virus that Emerged in a Vaccinated Infant
Norio Ogata, Alessandro R. Zanetti, Minshu Yu, Roger H. Miller, and Robert H. Purcell

524 Protective Immunity in Macaques Vaccinated with Live Attenuated, Recombinant, and Subunit Measles Vaccines in the Presence of Passively Acquired Antibodies
Robert S. van Binnendijk, Martien C. M. Poelen, Geert van Amerongen, Petra de Vries, and Albert D. M. E. Osterhaus

533 The Humoral Immune Response against Human Cytomegalovirus Is Characterized by a Delayed Synthesis of Glycoprotein-Specific Antibodies
Konrad Schoppel, Barbara Kropff, Christian Schmidt, Rolf Vornhagen, and Michael Mach

545 Host and Viral Factors Affecting the Decreased Immunogenicity of Sabin Type 3 Vaccine after Administration of Trivalent Oral Polio Vaccine to Rural Mayan Children
Yvonne A. Maldonado, Victor Peña-Cruz, Maria de la Luz Sanchez, Linda Logan, Stewart Blandón, Michael F. Cantwell, Suzanne M. Matsui, Francisco Millan-Velasco, Jose Luis Valdespino, and Jaime Sepulveda

554 Islet Cell Antibody Seroconversion in Children Is Temporally Associated with Enterovirus Infections
Merja Hiltunen, Heikki Hyöty, Mikael Knip, Jorma Ilonen, Helena Reijonen, Paula Vähäsalo, Merja Roivainen, Maria Lönnrot, Pauli Leinikki, Tapani Hovi, Hans K. Åkerblom, and the Childhood Diabetes in Finland (DiMe) Study Group

561 A Novel Approach to Assessing the Drug Susceptibility and Replication of Human Immunodeficiency Virus Type 1 Isolates
Robert M. Jellinger, Robert W. Shafer, and Thomas C. Merigan

567 Maternal Immunologic and Virologic Risk Factors for Infant Human Immunodeficiency Virus Type 1 Infection: Findings from the Women and Infants Transmission Study
Jane Pitt, Donald Brambilla, Pat Reichelderfer, Alan Landay, Kenneth McIntosh, David Burns, George V. Hillyer, Hermann Mendez, and Mary Glenn Fowler for the Women and Infants Transmission Study

576 Issues in the Design of Trials of Therapies for Subjects with Human Immunodeficiency Virus Infection that Use Plasma RNA Level as an Outcome
J. M. Raboud, J. S. G. Montaner, S. Rae, B. Conway, J. Singer, and M. T. Schechter

583 Comparison of Clinical Diagnosis and Standard Laboratory and Molecular Methods for the Diagnosis of Genital Ulcer Disease in Lesotho: Association with Human Immunodeficiency Virus Infection
Stephen A. Morse, David L. Trees, Ye Htun, Frans Radebe, Karina A. Orle, Yusuf Dangor, Consuelo M. Beck-Sague, Scott Schmid, Glenda Fehler, Judith B. Weiss, and Ronald C. Ballard

590 Colonization by *Streptococcus pneumoniae* among Human Immunodeficiency Virus–Infected Adults: Prevalence of Antibiotic Resistance, Impact of Immunization, and Characterization by Polymerase Chain Reaction with BOX Primers of Isolates from Persistent *S. pneumoniae* Carriers
Maria C. Rodriguez-Barradas, Reena A. Tharapel, Jean E. Groover, Karen P. Giron, Christine E. Lacke, Eric D. Houston, Richard J. Hamill, Mark C. Steinhoff, and Daniel M. Musher

598 Selection of Glycopeptide-Resistant Mutants of VanB-Type *Enterococcus faecalis* BM4281 In Vitro and in Experimental Endocarditis
Elisabeth Aslangul, Marina Baptista, Bruno Fantin, Florence Depardieu, Michel Arthur, Patrice Courvalin, and Claude Carbon

606 Vaginal Colonization by *Escherichia coli* as a Risk Factor for Very Low Birth Weight Delivery and Other Perinatal Complications
Marijane A. Krohn, Soe Soe Thwin, Lorna K. Rabe, Zane Brown, and Sharon L. Hillier

611 The Role of Lipopolysaccharide and Shiga-like Toxin in a Mouse Model of *Escherichia coli* O157:H7 Infection
Diana Karpman, Hugh Connell, Majlis Svensson, Flemming Scheutz, Per Alm, and Catharina Svanborg

621 A Novel Peptide-IgG Conjugate, $CAP18_{106-138}$-IgG, that Binds and Neutralizes Endotoxin and Kills Gram-Negative Bacteria
Mark A. Fletcher, Marek A. Kloczewiak, Paul M. Loiselle, Masanori Ogata, Mary W. Vermeulen, Emily M. Zanzot, and H. Shaw Warren

633 Endogenous Antibody Production to Botulinum Toxin in an Adult with Intestinal Colonization Botulism and Underlying Crohn's Disease
Patricia M. Griffin, Charles L. Hatheway, Richard B. Rosenbaum, and Robert Sokolow

638 Nasal and Bronchoalveolar Lavage Fluid Cytokines in Early Cystic Fibrosis
Terry L. Noah, Hugh R. Black, Pi-Wan Cheng, Robert E. Wood, and Margaret W. Leigh

648 Effects of Doxycycline and Antiinflammatory Agents on Experimentally Induced Chlamydial Upper Genital Tract Infection in Female Macaques
Dorothy L. Patton, Yvonne Cosgrove Sweeney, Nancy J. Bohannon, Agnes M. Clark, James P. Hughes, Alison Cappuccio, Lee Ann Campbell, and Walter E. Stamm

655 Isoenzyme Diversity in *Pneumocystis carinii* from Rats, Mice, and Rabbits
Edith Mazars, Karine Guyot, Isabelle Durand, Eduardo Dei-Cas, Samuel Boucher, Souha Ben Abderrazak, Anne-Laure Banuls, Michel Tibayrenc, and Daniel Camus

661 Lipid Transfer from Human Epithelial Cells to *Pneumocystis carinii* In Vitro
Stephen T. Furlong, Henry Koziel, Marilyn S. Bartlett, Gerald L. McLaughlin, Margaret M. Shaw, and Richard M. Jack

669 Tyrosine Kinases Are Required for Interferon-γ–Stimulated Proliferation of *Trypanosoma brucei brucei*
Elwaleed Mustafa, Moiz Bakhiet, Robert Jaster, Thomas Bittorf, Eilhard Mix, and Tomas Olsson

Concise Communications

674 Protection Provided by Hepatitis B Vaccine in a Yupik Eskimo Population—Results of a 10-Year Study
Robert B. Wainwright, Lisa R. Bulkow, Alan J. Parkinson, Carolyn Zanis, and Brian J. McMahon

678 A Comparative Trial of Standard or High-Dose S Subunit Recombinant Hepatitis B Vaccine versus a Vaccine Containing S Subunit, Pre-S_1, and Pre-S_2 Particles for Revaccination of Healthy Adult Nonresponders
Joseph S. Bertino, Jr., Paul Tirrell, Richard N. Greenberg, Harry L. Keyserling, Gregory A. Poland, Dieter Gump, Mary Lou Kumar, and Keith Ramsey

681 Semiquantitative Analysis of Intrahepatic Cytokine mRNAs in Chronic Hepatitis C
F. L. Dumoulin, A. Bach, L. Leifeld, M. El-Bakri, H.-P. Fischer, T. Sauerbruch, and U. Spengler

685 The Influence of Age on the Prevalence of Hepatitis C Virus Subtypes 1a and 1b
Heinz-Hubert Feucht, Matthias Schröter, Bernhard Zöllner, Susanne Polywka, Hartmut Nolte, and Rainer Laufs

689 Increased Levels of Interleukin-1ß and Soluble Intercellular Adhesion Molecule-1 in Cerebrospinal Fluid of Patients with Subacute Sclerosing Panencephalitis
P. D. Mehta, J. Kulczycki, S. P. Mehta, P. K. Coyle, and H. M. Wisniewski

693 Persistent Infection of Human Vascular Endothelial Cells by Group B Coxsackieviruses
Pier Giulio Conaldi, Caterina Serra, Angela Mossa, Valeria Falcone, Fulvio Basolo, Giovanni Camussi, Antonina Dolei, and Antonio Toniolo

697 Clinical Coxsackievirus B Isolates Differ from Laboratory Strains in Their Interaction with Two Cell Surface Receptors
Jeffrey M. Bergelson, John F. Modlin, Wendy Wieland-Alter, Jennifer A. Cunningham, Richard L. Crowell, and Robert W. Finberg

700 Detection of Enterovirus by Polymerase Chain Reaction and Culture in Cerebrospinal Fluid of Children with Transient Neurologic Complications Associated with Acute Febrile Illness
Mitsuaki Hosoya, Ken Honzumi, and Hitoshi Suzuki

703 Presence of Human Herpesvirus 8 Variants in the Oral Tissues of Human Immunodeficiency Virus–Infected Persons
L. Di Alberti, S. L. Ngui, S. R. Porter, P. M. Speight, C. M. Scully, J. M. Zakrewska, I. G. Williams, L. Artese, A. Piattelli, and C. G. Teo

707 Early Detection of Perinatal Human Immunodeficiency Virus (HIV) Type 1 Infection Using HIV RNA Amplification and Detection
Richard W. Steketee, Elaine J. Abrams, Donald M. Thea, Teresa M. Brown, Genevieve Lambert, Sherry Orloff, Jeremy Weedon, Mahrukh Bamji, Ellie E. Schoenbaum, Jennifer Rapier, Marcia L. Kalish, and the New York City Perinatal HIV Transmission Collaborative Study

712 Defining the Time of Fetal or Perinatal Acquisition of Human Immunodeficiency Virus Type 1 Infection on the Basis of Age at First Positive Culture
Leslie A. Kalish, Jane Pitt, Judy Lew, Sheldon Landesman, Clemente Diaz, Ronald Hershow, F. Blaine Hollinger, Marcello Pagano, Vincent Smeriglio, and Jack Moye for the Women and Infants Transmission Study (WITS)

716 Neutralizing Activity and Antibody Reactivity toward Immunogenic Regions of the Human T Cell Leukemia Virus Type I Surface Glycoprotein in Sera of Infected Patients with Different Clinical States
T. Astier-Gin, J. P. Portail, D. Londos-Gagliardi, D. Moynet, S. Blanchard, R. Dalibart, J. F. Pouliquen, M. C. Georges-Courbot, C. Hajjar, S. Sainte-Foie, and B. Guillemain

720 A Population-Based Seroepidemiologic Study of Human Granulocytic Ehrlichiosis and Lyme Borreliosis on the West Coast of Sweden
J. Stephen Dumler, Leif Dotevall, Rolf Gustafson, and Marta Granström

723 Transmission of *Streptococcus pyogenes* Causing Toxic Shock–like Syndrome among Family Members and Confirmation by DNA Macrorestriction Analysis
Satoshi Ichiyama, Kazumitsu Nakashima, Kaoru Shimokata, Michio Ohta, Yoshikata Shimizu, Kenji Ooe, Hideo Igarashi, and Teiko Murai

726 Duration of Detection of Fecal Excretion of *Escherichia coli* O157:H7 in Cattle
Thomas E. Besser, Dale D. Hancock, Lori C. Pritchett, Ella M. McRae, Daniel H. Rice, and Phillip I. Tarr

729 Cross-Reactive Antibodies against Gangliosides and *Campylobacter jejuni* Lipopolysaccharides in Patients with Guillain-Barré or Miller Fisher Syndrome
Bart C. Jacobs, Maarten P. Hazenberg, Pieter A. van Doorn, Hubert Ph. Endtz, and Frans G. A. van der Meché

734 *Entamoeba histolytica* and *Entamoeba dispar* Infection in Children in Bangladesh
Rashidul Haque, A. S. G. Faruque, Pauline Hahn, David M. Lyerly, and William A. Petri, Jr.

737 *Leishmania aethiopica* Derived from Diffuse Leishmaniasis Patients Preferentially Induce mRNA for Interleukin-10 while Those from Localized Leishmaniasis Patients Induce Interferon-γ
Hannah Akuffo, Kerima Maasho, Maine Blostedt, Bo Höjeberg, Sven Britton, and Moiz Bakhiet

742 **Notice and Erratum**

Volume 175 • Number 4 *April 1997*

Major Articles

743 Cervical Intraepithelial Neoplasia, Anogenital Cancer, and Other Cancer Types in Women after Hospitalization for Condylomata Acuminata
S. Friis, S. K. Kjær, M. Frisch, L. Mellemkjær, and J. H. Olsen

749 Serum Levels of Rubella Virus Antibodies Indicating Immunity: Response to Vaccination of Subjects with Low or Undetectable Antibody Concentrations
Lukas Matter, Karen Kogelschatz, and Daniel Germann

756 Immunologic Responses to Vaccinia Vaccines Administered by Different Parenteral Routes
David J. McClain, Shannon Harrison, Curtis L. Yeager, John Cruz, Francis A. Ennis, Paul Gibbs, Michael S. Wright, Peter L. Summers, James D. Arthur, and Jess A. Graham

764 Neutralization of a Clade B Primary Isolate by Sera from Human Immunodeficiency Virus–Uninfected Recipients of Candidate AIDS Vaccines
Susan Zolla-Pazner, Carl Alving, Robert Belshe, Phillip Berman, Sherri Burda, Padmasree Chigurupati, Mary Lou Clements, Anne-Marie Duliege, Jean-Louis Excler, Catarina Hioe, James Kahn, M. Juliana McElrath, Sandra Sharpe, Faruk Sinangil, Kathelyn Steimer, Mary Clare Walker, Nabila Wassef, and Serena Xu

775 Is There a General Tendency for CD4 Lymphocyte Decline to Speed Up during Human Immunodeficiency Virus Infection? Evidence from the Italian Seroconversion Study
Alessandro Cozzi Lepri, Caroline A. Sabin, Patrizio Pezzotti, Peter D. England, Andrew N. Phillips, and Giovanni Rezza for the Italian Seroconversion Study

781 Subcutaneous Administration of Interleukin-2 in Human Immunodeficiency Virus Type 1–Infected Persons
Richard T. Davey, Jr., Doreen G. Chaitt, Stephen C. Piscitelli, Mary Wells, Joseph A. Kovacs, Robert E. Walker, Judith Falloon, Michael A. Polis, Julia A. Metcalf, Henry Masur, Gwendolyn Fyfe, and H. Clifford Lane

790 The Interleukin-2 Fusion Protein, DAB_{389}IL-2, Inhibits the Development of Infectious Virus in Human Immunodeficiency Virus Type 1–Infected Human Peripheral Blood Mononuclear Cells
Lin J. Zhang, Cory A. Waters, Louis R. Poisson, Leonard F. Estis, and Clyde S. Crumpacker

795 Serum Levels of Virus Burden in Early-Stage Human Immunodeficiency Virus Type 1 Disease in Women
James S. Evans, Theresa Nims, John Cooley, William Bradley, Linda Jagodzinski, Susan Zhou, Gregory P. Melcher, Donald S. Burke, and Maryanne Vahey

801 A Pilot Study of Hydroxyurea among Patients with Advanced Human Immunodeficiency Virus (HIV) Disease Receiving Chronic Didanosine Therapy: Canadian HIV Trials Network Protocol 080
Julio S. G. Montaner, Carlos Zala, Brian Conway, Janet Raboud, Pierre Patenaude, Sandra Rae, Michael V. O'Shaughnessy, and Martin T. Schechter

807 Epidemiology and Clinical Impact of Parainfluenza Virus Infections in Otherwise Healthy Infants and Young Children <5 Years Old
George Reed, Paula H. Jewett, Juliette Thompson, Sharon Tollefson, and Peter F. Wright

814 Severity of Respiratory Syncytial Virus Infection Is Related to Virus Strain
Edward E. Walsh, Kenneth M. McConnochie, Christine E. Long, and Caroline B. Hall

821 Anti–Interleukin-6 Antibodies Inhibit Herpes Simplex Virus Reactivation
John D. Kriesel, Bryan M. Gebhardt, James M. Hill, Sarah A. Maulden, Ivan P. Hwang, Thomas E. Clinch, Xia Cao, Spotswood L. Spruance, and Barbara A. Araneo

828 Epidemic Venezuelan Equine Encephalitis in La Guajira, Colombia, 1995
F. Rivas, L. A. Diaz, V. M. Cardenas, E. Daza, L. Bruzon, A. Alcala, O. De la Hoz, F. M. Caceres, G. Aristizabal, J. W. Martinez, D. Revelo, F. De la Hoz, J. Boshell, T. Camacho, L. Calderon, V. A. Olano, L. I. Villarreal, D. Roselli, G. Alvarez, G. Ludwig, and T. Tsai

833 Urethral Infection in a Workplace Population of East African Men: Evaluation of Strategies for Screening and Management
Denis J. Jackson, Joel P. Rakwar, Bhavna Chohan, Kishorchandra Mandaliya, Job J. Bwayo, Jeckoniah O. Ndinya-Achola, Nico J. D. Nagelkerke, Joan K. Kreiss, and Stephen Moses

839 Intranasal Immunization of Mice with PspA (Pneumococcal Surface Protein A) Can Prevent Intranasal Carriage, Pulmonary Infection, and Sepsis with *Streptococcus pneumoniae*
Hong-Yin Wu, Moon H. Nahm, Y. Guo, Michael W. Russell, and David E. Briles

847 A Role for C5 and C5a-ase in the Acute Neutrophil Response to Group B Streptococcal Infections
John F. Bohnsack, Kartika Widjaja, Saied Ghazizadeh, Craig E. Rubens, David R. Hillyard, Charles J. Parker, Kurt H. Albertine, and Harry R. Hill

856 Genetic and Antigenic Diversity of *Ehrlichia chaffeensis*: Comparative Analysis of a Novel Human Strain from Oklahoma and Previously Isolated Strains
Sheng-Min Chen, Xue-Jie Yu, Vsevolod L. Popov, Eric L. Westerman, Frank G. Hamilton, and David H. Walker

864 Characterization of Endemic Strains of *Shigella sonnei* by Use of Plasmid DNA Analysis and Pulsed-Field Gel Electrophoresis to Detect Patterns of Transmission
Christine M. Litwin, Rebecca B. Leonard, Karen C. Carroll, Wendi K. Drummond, and Andrew T. Pavia

871 Safety and Immunogenicity of Live Oral Cholera and Typhoid Vaccines Administered Alone or in Combination with Antimalarial Drugs, Oral Polio Vaccine, or Yellow Fever Vaccine
Herwig Kollaritsch, John U. Que, Christian Kunz, Gerhard Wiedermann, Christian Herzog, and Stanley J. Cryz, Jr.

876 An International Outbreak of *Salmonella* Infections Caused by Alfalfa Sprouts Grown from Contaminated Seeds
Barbara E. Mahon, Antti Pönkä, William N. Hall, Kenneth Komatsu, Stephen E. Dietrich, Anja Siitonen, Gary Cage, Peggy S. Hayes, Mary Ann Lambert-Fair, Nancy H. Bean, Patricia M. Griffin, and Laurence Slutsker

883 Murine Models of *Chlamydia pneumoniae* Infection and Atherosclerosis
Teresa C. Moazed, Cho-chou Kuo, J. Thomas Grayston, and Lee Ann Campbell

891 Cytokines Enhance Neutrophils from Human Immunodeficiency Virus–Negative Donors and AIDS Patients to Inhibit the Growth of *Mycobacterium avium* In Vitro
Gale W. Newman, Joseph R. Guarnaccia, Heinz G. Remold, and Powel H. Kazanjian, Jr.

901 Novel Anti–*Pneumocystis carinii* Effects of the Immunosuppressant Mycophenolate Mofetil in Contrast to Provocative Effects of Tacrolimus, Sirolimus, and Dexamethasone
Helieh S. Oz and Walter T. Hughes

905 Modulation of Immune Responses in Murine Pulmonary Histoplasmosis
Ruth Allendoerfer, Gregory P. Boivin, and George S. Deepe, Jr.

915 Clinical Manifestations of *Plasmodium falciparum* Malaria Experimentally Induced by Mosquito Challenge
L. W. Preston Church, Thong P. Le, Joe P. Bryan, Daniel M. Gordon, Robert Edelman, Louis Fries, Jonathan R. Davis, Deirdre A. Herrington, David F. Clyde, Moshe J. Shmuklarsky, Imogene Schneider, Thomas W. McGovern, Jeffrey D. Chulay, W. Ripley Ballou, and Stephen L. Hoffman

921 Analysis of Multiple *Plasmodium falciparum* Infections in Tanzanian Children during the Phase III Trial of the Malaria Vaccine SPf66
H.-P. Beck, I. Felger, W. Huber, S. Steiger, T. Smith, N. Weiss, P. Alonso, and M. Tanner

Concise Communications

927 Cytotoxic T Lymphocyte Responses to E6 and E7 Proteins of Human Papillomavirus Type 16: Relationship to Cervical Intraepithelial Neoplasia
Mayumi Nakagawa, Daniel P. Stites, Sepideh Farhat, Jerry R. Sisler, Bernard Moss, Francis Kong, Anna-Barbara Moscicki, and Joel M. Palefsky

932 Immunoprophylaxis of Group B Respiratory Syncytial Virus Infection in Cotton Rats
Luis A. Faverio, Franco M. Piazza, Susan A. Johnson, Miriam E. R. Darnell, Martin G. Ottolini, Val G. Hemming, and Gregory A. Prince

935 The Guinea Pig as a Model for the Study of Maternal Immunization against Respiratory Syncytial Virus Infections in Infancy
Wanicha Buraphacheep and Wayne M. Sullender

938 Variation of Hepatitis C Virus Hypervariable Region 1 in Immunocompromised Patients
Jacob Odeberg, Zhibing Yun, Anders Sönnerborg, Kristian Bjøro, Mathias Uhlén, and Joakim Lundeberg

944 Value of Cytomegalovirus (CMV) IgG Avidity Index for the Diagnosis of Primary CMV Infection in Pregnant Women
Liliane Grangeot-Keros, Marie Jeanne Mayaux, Pierre Lebon, François Freymuth, Geneviève Eugene, René Stricker, and Elisabeth Dussaix

947 High Incidence of Kaposi's Sarcoma–Associated Herpesvirus and Epstein-Barr Virus in Tumor Lesions and Peripheral Blood Mononuclear Cells from Patients with Kaposi's Sarcoma in Uganda
Scott F. Purvis, Edward Katongole-Mbidde, John L. Johnson, Debra G. B. Leonard, Naome Byabazaire, Carol Luckey, H. Elizabeth Schick, Robert Wallis, Craig A. Elmets, and Chou-Zen Giam

951 Epidemiology of Mexico Virus, a Small Round-Structured Virus in Yorkshire, United Kingdom, between January 1992 and March 1995
David C. Lewis, Antony Hale, Xi Jiang, Roger Eglin, and David W. G. Brown

955 Human Immunodeficiency Virus Infection and AIDS in a Person with Negative Serology
Luc Montagnier, Catherine Brenner, Sophie Chamaret, Denise Guétard, Alain Blanchard, Jacqueline de Saint Martin, Jean-Dominique Poveda, Gilles Pialoux, and Marie-Lise Gougeon

959 Detection of Infection with Human Immunodeficiency Virus Type 1 before Seroconversion: Correlation with Clinical Symptoms and Outcome
John P. Phair, Joseph B. Margolick, Lisa P. Jacobson, Jack Phillips, Charles Rinaldo, Richard Kaslow, Clara Chu, Janis V. Giorgi, and Denis Henrard

963 Levels of Human Immunodeficiency Virus Type 1 RNA in Cerebrospinal Fluid Correlate with AIDS Dementia Stage
Bruce J. Brew, Louise Pemberton, Phillip Cunningham, and Matthew G. Law

966 High-Dose Nevirapine in Previously Untreated Human Immunodeficiency Virus Type 1–Infected Persons Does Not Result in Sustained Suppression of Viral Replication
M. D de Jong, S. Vella, A. Carr, C. A. B. Boucher, A. Imrie, M. French, J. Hoy, S. Sorice, S. Pauluzzi, F. Chiodo, G. J. Weverling, M. E. van der Ende, Ph. J. Frissen, H. M. Weigel, R. H. Kauffmann, J. M. A. Lange, R. Yoon, M. Moroni, E. Hoenderdos, G. Leitz, D. A. Cooper, D. Hall, and P. Reiss

971 Analysis of the Maternal Components of the AIDS Clinical Trial Group 076 Zidovudine Regimen in the Prevention of Mother-to-Infant Transmission of Human Immunodeficiency Virus Type 1
L. M. Frenkel, M. K. Cowles, D. E. Shapiro, A. J. Melvin, D. H. Watts, C. McLellan, K. Mohan, B. Murante, S. Burchett, Y. J. Bryson, M. J. O'Sullivan, C. Mitchell, and D. Landers

975 Responsiveness of Human Immunodeficiency Virus Type 1–Infected Kenyan Women with or without Prior Pneumococcal Disease to Pneumococcal Vaccine
Edward N. Janoff, Claudine Fasching, Josephine C. Ojoo, James O'Brien, and Charles F. Gilks

979 Serotype-Related Differences in Inflammatory Response to *Streptococcus pneumoniae* in Experimental Meningitis
Dan Engelhard, Shlomo Pomeranz, Ruth Gallily, Nurith Strauss, and Elaine Tuomanen

983 Discovery of Disseminated J96-like Strains of Uropathogenic *Escherichia coli* O4:H5 Containing Genes for both $PapG_{J96}$ (Class I) and $PrsG_{J96}$ (Class III) Gal(α1-4)Gal–Binding Adhesins
James R. Johnson, Thomas A. Russo, Flemming Scheutz, Jennifer J. Brown, Lixin Zhang, Karen Palin, Christopher Rode, Craig Bloch, Carl F. Marrs, and Betsy Foxman

989 Transmission of Uropathogens between Sex Partners
Betsy Foxman, Lixin Zhang, Patricia Tallman, Bonnie C. Andree, Ann M. Geiger, James S. Koopman, Brenda W. Gillespie, Karen A. Palin, Jack D. Sobel, Christopher K. Rode, Craig A. Bloch, and Carl F. Marrs

992 Postoperative *Serratia marcescens* Wound Infections Traced to an Out-of-Hospital Source
Douglas J. Passaro, Lyn Waring, Robert Armstrong, Fern Bolding, Brenda Bouvier, Jon Rosenberg, Arthur W. Reingold, Mari McQuitty, Sean M. Philpott, William R. Jarvis, S. Benson Werner, Lucy S. Tompkins, and Duc J. Vugia

996 Duration of Tick Attachment as a Predictor of the Risk of Lyme Disease in an Area in which Lyme Disease Is Endemic
Sunil K. Sood, Mark B. Salzman, Barbara J. B. Johnson, Christine M. Happ, Kevin Feig, Lillian Carmody, Lorry G. Rubin, Eileen Hilton, and Joseph Piesman

1000 Lyme Borreliosis in Transgenic Mice Tolerant to OspA from *Borrelia burgdorferi* 25015
Erol Fikrig, Stephen W. Barthold, Manchuan Chen, Hong Tao, Pia Ali-Salaam, Linda K. Bockenstedt, and Richard A. Flavell

1004 Age-Related Decline in Murine Macrophage Production of Nitric Oxide
Eugene Kissin, Maurizio Tomasi, Nancy McCartney-Francis, Cari L. Gibbs, and Phillip D. Smith

1008 Differential Effects of Pentoxifylline and Interleukin-10 on Production of Tumor Necrosis Factor and Inducible Nitric Oxide Synthase by Murine Macrophages
Laura L. Loftis, Elizabeth A. Meals, and B. Keith English

1012 Granulocyte Colony-Stimulating Factor Administered In Vivo Augments Neutrophil-Mediated Activity against Opportunistic Fungal Pathogens
W. Conrad Liles, Jane E. Huang, Jo-Anne H. van Burik, Raleigh A. Bowden, and David C. Dale

1016 Transmission and Establishment of a Persistent Infection of *Enterocytozoon bieneusi*, Derived from a Human with AIDS, in Simian Immunodeficiency Virus–Infected Rhesus Monkeys
Saul Tzipori, Angela Carville, Giovanni Widmer, Donald Kotler, Keith Mansfield, and Andrew Lackner

1020 High Seroprevalence of *Encephalitozoon* Species in Immunocompetent Subjects
Tom van Gool, J. C. M. Vetter, B. Weinmayr, A. Van Dam, F. Derouin, and J. Dankert

Correspondence

1025 Effect of Pregnancy on the Risk of Developing Active Tuberculosis
Robert S. Klein

1025 Reply
Arthur L. Reingold and Marcos E. Espinal

1026 Parenteral and Sexual Tramsmission of GB Virus C and Hepatitis C Virus among Human Immunodeficiency Virus–Positive Patients
Gianfranco Fiordalisi, Alessandra Bettinardi, Isabella Zanella, Roberto Stellini, Giuseppe Paraninfo, Gianpietro Cadeo, and Daniele Primi

1027 **Errata**

1028 **Notices**

Instructions for Authors

Volume 175 • Number 5 *May 1997*

Major Articles

1029 The Relationship between Serum Human Immunodeficiency Virus Type 1 (HIV-1) RNA Level, CD4 Lymphocyte Percent, and Long-Term Mortality Risk in HIV-1–Infected Children
Lynne M. Mofenson, James Korelitz, William A. Meyer III, James Bethel, Kenneth Rich, Savita Pahwa, John Moye, Jr., Robert Nugent, and Jennifer Read for the National Institute of Child Health and Human Development Intravenous Immunoglobulin Clinical Trial Study Group

1039 Evaluation of Pharmacokinetics, Safety, Tolerance, and Activity of Combination of Zalcitabine and Zidovudine in Stable, Zidovudine-Treated Pediatric Patients with Human Immunodeficiency Virus Infection
Saroj S. Bakshi, Paula Britto, Edmund Capparelli, Lynne Mofenson, Mary Glen Fowler, Suraiya Rasheed, David Schoenfeld, Bonnie Zimmer, Yitzchak Frank, Ram Yogev, Eleanor Jimenez, Miklos Salgo, Gloria Boone, and Savita G. Pahwa for the AIDS Clinical Trials Group Protocol 190 Team

1051 Effects of a Combination of Zidovudine, Didanosine, and Lamivudine on Primary Human Immunodeficiency Virus Type 1 Infection
Alain Lafeuillade, Cécile Poggi, Catherine Tamalet, Nérina Profizi, Christian Tourres, and Olivier Costes

1056 Evaluation of Monoclonal Antibodies to Human Immunodeficiency Virus Type 1 Primary Isolates by Neutralization Assays: Performance Criteria for Selecting Candidate Antibodies for Clinical Trials
M. Patricia D'Souza, Daniella Livnat, James A. Bradac, Sandra H. Bridges, the AIDS Clinical Trials Group Antibody Selection Working Group, and Collaborating Investigators

1063 In Vitro Effect of α_1-Acid Glycoprotein on the Anti–Human Immunodeficiency Virus (HIV) Activity of the Protease Inhibitor CGP 61755: A Comparative Study with Other Relevant HIV Protease Inhibitors
Janis K. Lazdins, Jürgen Mestan, Gerard Goutte, Maja R. Walker, Guido Bold, Hans Georg Capraro, and Thomas Klimkait

1071 Detection of Serum Antibodies to a Kaposi's Sarcoma–Associated Herpesvirus-Specific Peptide
David A. Davis, Rachel W. Humphrey, Fonda M. Newcomb, Thomas R. O'Brien, James J. Goedert, Stephen E. Straus, and Robert Yarchoan

1080 Ganciclovir Treatment of Symptomatic Congenital Cytomegalovirus Infection: Results of a Phase II Study
Richard J. Whitley, Gretchen Cloud, William Gruber, Gregory A. Storch, Gail J. Demmler, Richard F. Jacobs, Wayne Dankner, Stephen A. Spector, Stuart Starr, Robert F. Pass, Sergio Stagno, William J. Britt, Charles Alford, Jr., Seng-jaw Soong, Xiao-Jian Zhou, Lanette Sherrill, Jan M. FitzGerald, Jean-Pierre Sommadossi, and the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group

1087 Antiviral Susceptibilities and Analysis of UL97 and DNA Polymerase Sequences of Clinical Cytomegalovirus Isolates from Immunocompromised Patients
Alejo Erice, Cristina Gil-Roda, José-Luis Pérez, Henry H. Balfour, Jr., Kim J. Sannerud, Michelle N. Hanson, Guy Boivin, and Sunwen Chou

1093 Hepatitis B Virus Core Protein Mutations Are Concentrated in B Cell Epitopes in Progressive Disease and in T Helper Cell Epitopes during Clinical Remission
William F. Carman, Winifred Boner, Giovanna Fattovich, Kathryn Colman, Edward S. Dornan, Mark Thursz, and Stephanos Hadziyannis

1101 Assessment of Hepatitis C Virus Quasispecies Heterogeneity by Gel Shift Analysis: Correlation with Response to Interferon Therapy
Stephen J. Polyak, Greg Faulkner, Robert L. Carithers, Jr., Lawrence Corey, and David R. Gretch

1108 Rhinovirus-Specific T Cells Recognize both Shared and Serotype-Restricted Viral Epitopes
James E. Gern, Elliot C. Dick, Elizabeth A. B. Kelly, Rose Vrtis, and Bruce Klein

1115 Identification of Key Gene Products Required for Acquisition of Plasmin-like Enzymatic Activity by Group A Streptococci
Robert Christner, Zhuqing Li, Roberta Raeder, Andreas Podbielski, and Michael D. P. Boyle

1121 Enterobacteria-Infected T Cells as Antigen-Presenting Cells for Cytotoxic CD8 T Cells: A Contribution to the Self-Limitation of Cellular Immune Reactions in Reactive Arthritis?
Birgit Ackermann, Martin S. Staege, Angelika B. Reske-Kunz, Hans-Peter Dienes, Karl-Hermann Meyer zum Büschenfelde, and Elisabeth Märker-Hermann

1128 Characterization and Quantitative Analysis of Serum IgG Class and Subclass Response to *Shigella sonnei* and *Shigella flexneri* 2a Lipopolysaccharide following Natural *Shigella* Infection
Guy Robin, Dani Cohen, Nadav Orr, Ita Markus, Raphael Slepon, Shai Ashkenazi, and Yona Keisari

1134 Molecular Characterization of *Vibrio cholerae* O1 Biotype El Tor Strains Isolated between 1992 and 1995 in Calcutta, India: Evidence for the Emergence of a New Clone of the El Tor Biotype
Charu Sharma, G. Balakrish Nair, A. K. Mukhopadhyay, S. K. Bhattacharya, R. K. Ghosh, and Amit Ghosh

1142 *Rickettsia conorii* Infection Enhances Vascular Cell Adhesion Molecule-1– and Intercellular Adhesion Molecule-1–Dependent Mononuclear Cell Adherence to Endothelial Cells
Françoise Dignat-George, Nadine Teysseire, Murielle Mutin, Nathalie Bardin, Ghislaine Lesaule, Didier Raoult, and José Sampol

1153 Antibody to Chlamydial hsp60 Predicts an Increased Risk for Chlamydial Pelvic Inflammatory Disease
Rosanna W. Peeling, Joshua Kimani, Francis Plummer, Ian Maclean, Mary Cheang, Job Bwayo, and Robert C. Brunham

1159 Interaction of Human Mannose-Binding Protein with *Mycobacterium avium*
Vsevolod Y. Polotsky, John T. Belisle, Katarina Mikusova, R. Alan B. Ezekowitz, and Keith A. Joiner

1169 Assessment of a Mouse Model of Neutropenia and the Effect of an Anti-Candidiasis Monoclonal Antibody in These Animals
Yongmoon Han and Jim E. Cutler

1176 Interleukin (IL)-2, IL-4, and Tumor Necrosis Factor-α Responses during *Entamoeba histolytica* Liver Abscess Development in Gerbils
Darren Campbell and Kris Chadee

1184 In Vivo Effects of Recombinant Human Granulocyte Colony-Stimulating Factor on Neutrophil Oxidative Functions in Normal Human Volunteers
Robert C. Allen, Paul R. Stevens, Thomas H. Price, Gurkamal S. Chatta, and David C. Dale

Concise Communications

1193 Analysis of Human Herpesvirus Type 8 Infection in AIDS-Related and AIDS-Unrelated Primary Central Nervous System Lymphoma
Gianluca Gaidano, Daniela Capello, Cristina Pastore, Andrea Antinori, Annunziata Gloghini, Antonino Carbone, Luigi Maria Larocca, and Giuseppe Saglio

1198 Exacerbations of Clinical Symptoms in Human Immunodeficiency Virus Type 1–Infected Patients with Multicentric Castleman's Disease Are Associated with a High Increase in Kaposi's Sarcoma Herpesvirus DNA Load in Peripheral Blood Mononuclear Cells
Marc Grandadam, Nicolas Dupin, Vincent Calvez, Isabelle Gorin, Laurent Blum, Serge Kernbaum, Didier Sicard, Yves Buisson, Henri Agut, Jean Paul Escande, and Jean Marie Huraux

1202 Monitoring Responses to Antiretroviral Treatment in Human Immunodeficiency Virus Type 1 (HIV-1)–Infected Patients by Serial Lymph Node Aspiration
Philippe Bürgisser, François Spertini, Catherine Weyrich-Suter, Jean-Luc Pagani, and Pascal R. A. Meylan

1206 Influence of Other Maternal Variables on the Relationship between Maternal Virus Load and Mother-to-Infant Transmission of Human Immunodeficiency Virus Type 1
David N. Burns, Sheldon Landesman, David J. Wright, David Waters, Richard M. Mitchell, Arye Rubinstein, Anne Willoughby, and James J. Goedert

1210 Pentoxifylline Improves Cell-Mediated Immunity and Reduces Human Immunodeficiency Virus (HIV) Plasma Viremia in Asymptomatic HIV-Seropositive Persons
Mario Clerici, Stefania Piconi, Claudia Balotta, Daria Trabattoni, Amedeo Capetti, Maria Luisa Fusi, Stefania Ruzzante, Renato Longhi, Maria Chiara Colombo, Mauro Moroni, and Francesco Milazzo

1216 A Role for Apoptosis in the Pathogenesis of AIDS-Related Idiopathic Esophageal Ulcers
JeanMarie Houghton, Reju M. Korah, Kyung H. Kim, and Michael B. Small

1220 Herpes Simplex Virus Type 1 Induces Apoptosis in Peripheral Blood T Lymphocytes
Masahiro Ito, Masahiro Watanabe, Hitoshi Kamiya, and Minoru Sakurai

1225 Seroprevalence of and Risk Factors for Hepatitis A Infection among Young Homosexual and Bisexual Men
Mitchell H. Katz, Ling Hsu, Ernie Wong, Sally Liska, Laura Anderson, and Robert S. Janssen

1229 Prevalence and Genotype of Hepatitis G Virus in Chinese Professional Blood Donors and Hepatitis Patients
Hai-Lin Wang and Dong-Yan Jin

1233 Two Major Strains of Type 1 Wild Poliovirus Circulating in Indochina
Hiromu Yoshida, Jie Li, Tetsuo Yoneyama, Kumiko Yoshii, Hiroyuki Shimizu, Nguyen Thi Hien Thanh, Kohei Toda, Nguyen Thanh Long, Phan Van Tu, Tatsuo Miyamura, and Akio Hagiwara

1237 Therapeutic Potential of Human Antisera to Group B Streptococcal Glycoconjugate Vaccines in Neonatal Mice
Lawrence C. Paoletti, Julieanne Pinel, Ariane K. Rodewald, and Dennis L. Kasper

1240 Seroprevalence of CagA-Positive Strains among *Helicobacter pylori*–Infected, Healthy Young Adults
Julie Parsonnet, Marilyn Replogle, Shufang Yang, and Robert Hiatt

1243 A Mouse Model of *Borrelia* Meningitis after Intradermal Injection
Juan C. Garcia-Monco, Nancy S. Miller, P. Bryon Backenson, Pedro Anda, and Jorge L. Benach

1246 *Bordetella pertussis* Respiratory Infection in Children Is Associated with Preferential Activation of Type 1 T Helper Cells
Mark Ryan, Geraldine Murphy, Leif Gothefors, Lennart Nilsson, Jann Storsaeter, and Kingston H. G. Mills

1251 The Potential of the ESAT-6 Antigen Secreted by Virulent Mycobacteria for Specific Diagnosis of Tuberculosis
John M. Pollock and Peter Andersen

1255 Differential Antibiotic-Induced Endotoxin Release and Interleukin-6 Production by Human Umbilical Vein Endothelial Cells (HUVECs): Amplification of the Response by Coincubation of HUVECs and Blood Cells
Moshe Arditi and Jin Zhou

1259 Transfusion-Transmitted Babesiosis in Washington State: First Reported Case Caused by a WA1-Type Parasite
Barbara L. Herwaldt, Anne M. Kjemtrup, Patricia A. Conrad, Robert C. Barnes, Marianna Wilson, Maureen G. McCarthy, Merlyn H. Sayers, and Mark L. Eberhard

1263 Immunosuppression in Paracoccidioidomycosis: T Cell Hyporesponsiveness to Two *Paracoccidioides brasiliensis* Glycoproteins that Elicit Strong Humoral Immune Response
Gil Benard, Maria José S. Mendes-Giannini, Michelangelo Juvenale, Elaine T. Miranda, and Alberto J. S. Duarte

1268 An In Vitro Model of Infection of Human Biliary Epithelial Cells by *Cryptosporidium parvum*
Renaud Verdon, Gerald T. Keusch, Saul Tzipori, Shelley A. Grubman, Douglas M. Jefferson, and Honorine D. Ward

1272 Long-Lasting Antibodies Detected by a *trans*-Sialidase Inhibition Assay of Sera from Parasite-Free, Serologically Cured Chagasic Patients
María S. Leguizamón, Graciela Russomando, Alejandro Luquetti, Anis Rassi, María Almirón, Stella Maris González-Cappa, Alberto Carlos C. Frasch, and Oscar Campetella

1276 Depression of Antigen-Specific Interleukin-5 and Interferon-γ Responses in Human Lymphatic Filariasis as a Function of Clinical Status and Age
Erliyani Sartono, Yvonne C. M. Kruize, Agnes Kurniawan, Rick M. Maizels, and Maria Yazdanbakhsh

1280 Foodborne Outbreaks of Human Toxoplasmosis
Won-Young Choi, Ho-Woo Nam, No-Hoon Kwak, Won Huh, Yang-Ree Kim, Moon-Won Kang, Seung-Yull Cho, and J. P. Dubey

Correspondence

1283 Eosinophilia in Patients Infected with Human Immunodeficiency Virus
R. Colebunders, C. Van Den Eynde, A. Tolo, Y. Fleerackers, G. Vanham, L. Kestens, T. Vervoort, and K. Depraetere

1283 Reply
Roy T. Steigbigel

1283 Circadian Time Structure of Septic Shock: Timing Is Everything
William J. M. Hrushesky and Patricia A. Wood

1284 Reply
Thomas Pollmächer, Janet Mullington, Florian Holsboer, and Chris Galanos

Volume 175 • Number 6 *June 1997*

Major Articles

1285 Genotypes, nt 1858 Variants, and Geographic Origin of Hepatitis B Virus—Large-Scale Analysis Using a New Genotyping Method
Magnus Lindh, Ann-Sofi Andersson, and Annkatrin Gusdal

1294 Interferon-α Treatment Induces Delayed CD4 Proliferative Responses to the Hepatitis C Virus Nonstructural Protein 3 Regardless of the Outcome of Therapy
Zhu-Xu Zhang, David R. Milich, Darrell L. Peterson, Ashley Birkett, Robert Schvarcz, Ola Weiland, and Matti Sällberg

1302 Detection of Hepatitis G Virus (HGV) RNA: Clinical Characteristics of Acute HGV Infection
T. L. Yashina, M. O. Favorov, Y. E. Khudyakov, H. A. Fields, O. O. Znoiko, T. V. Shkurko, T. Bonafonte, J. S. Sevall, M. S. Agopian, and J. B. Peter

1308 Evaluation of Retinal Toxicity and Efficacy of Anti-Cytomegalovirus and Anti–Herpes Simplex Virus Antiviral Phosphorothioate Oligonucleotides ISIS 2922 and ISIS 4015
Marissa Flores-Aguilar, Gilberto Besen, Chau Vuong, Misako Tatebayashi, David Munguia, Pacifico Gangan, Clayton A. Wiley, and William R. Freeman

1317 Immune Responses to Individual Rotavirus Proteins following Heterologous and Homologous Rotavirus Infection in Mice
Shin-Ichi Ishida, Ningguo Feng, Joanna M. Gilbert, Baozhang Tang, and Harry B. Greenberg

1324 Epstein-Barr Virus and Human Herpesvirus 8 Prevalence in Human Immunodeficiency Virus–Associated Oral Mucosal Lesions
Jennifer Webster-Cyriaque, Rachel H. Edwards, Evelyn B. Quinlivan, Lauren Patton, David Wohl, and Nancy Raab-Traub

1333 Diagnosis of Perinatal Human Immunodeficiency Virus Infection by Polymerase Chain Reaction and p24 Antigen Detection after Immune Complex Dissociation in an Urban Community Hospital
Steven Nesheim, Francis Lee, Marcia L. Kalish, Chin-Yih Ou, Mary Sawyer, Scott Clark, Lynn Meadows, Vickie Grimes, R. J. Simonds, and André Nahmias

1337 Experimental Perinatal Transmission of Human Immunodeficiency Virus Type 1 by Passage of Infected T Cells
R. Mark Simpson, Beth Schmidt Hubbard, Tong Mao Zhao, and Thomas J. Kindt

1344 Additive or Sequential Nucleoside Analogue Therapy Compared with Continued Zidovudine Monotherapy in Human Immunodeficiency Virus–Infected Patients with Advanced Disease Does Not Prolong Survival: An Observational Study
Remko van Leeuwen, Gouke J. Bonsel, Peter Reiss, Sven A. Danner, and Joep M. A. Lange

1352 Rapid Disease Progression without Seroconversion following Primary Human Immunodeficiency Virus Type 1 Infection—Evidence for Highly Susceptible Human Hosts
Nelson L. Michael, Arthur E. Brown, Robert F. Voigt, Sarah S. Frankel, John R. Mascola, Karen S. Brothers, Mark Louder, Deborah L. Birx, and Sharon A. Cassol

1360 Characterization of a Polyclonal Cytolytic T Lymphocyte Response to Human Immunodeficiency Virus in Persons without Clinical Progression
N. M. Lubaki, S. C. Ray, B. Dhruva, T. C. Quinn, R. F. Siliciano, and R. C. Bollinger

1368 Dexamethasone Therapy Worsens the Neuropathology of Human Immunodeficiency Virus Type 1 Encephalitis in SCID Mice
Jenae Limoges, Yuri Persidsky, Paul Bock, and Howard E. Gendelman

1382 Genetic and Phenotypic Analysis of *Escherichia coli* with Enteropathogenic Characteristics Isolated from Seattle Children
Theresa N. Bokete, Thomas S. Whittam, Richard A. Wilson, Carla R. Clausen, Cliff M. O'Callahan, Steve L. Moseley, Thomas R. Fritsche, and Phillip I. Tarr

1390 Comparison of Enzyme Immunoassays for Antibodies to *Haemophilus ducreyi* in a Community Outbreak of Chancroid in the United States
Cheng-Yen Chen, Kristen J. Mertz, Stanley M. Spinola, and Stephen A. Morse

1396 Antimicrobial Resistance in *Neisseria gonorrhoeae* in the United States, 1988–1994: The Emergence of Decreased Susceptibility to the Fluoroquinolones
Kimberley K. Fox, Joan S. Knapp, King K. Holmes, Edward W. Hook III, Franklyn N. Judson, Sumner E. Thompson, John A. Washington, and William L. Whittington

1404 Contrasting Effects of Lipopolysaccharides (Endotoxins) from Oral Black-Pigmented Bacteria and Enterobacteriaceae on Platelets, a Major Source of Sertonin, and on Histamine-Forming Enzyme in Mice
Yasuo Endo, Masahiko Shibazaki, Masanori Nakamura, and Haruhiko Takada

1413 Penicillin-Resistant *Streptococcus pneumoniae* in the Netherlands: Results of a 1-Year Molecular Epidemiologic Survey
Peter W. M. Hermans, Marcel Sluijter, Kees Elzenaar, Ans van Veen, Joris J. M. Schonkeren, Floortje M. Nooren, Wijnanda J. van Leeuwen, Albert J. de Neeling, Bert van Klingeren, Henri A. Verbrugh, and Ronald de Groot

1423 Immunodominant Domains Present on the *Bordetella pertussis* Vaccine Component Filamentous Hemagglutinin
Elizabeth Leininger, Steven Bowen, Genevieve Renauld-Mongénie, Julie H. Rouse, Franco D. Menozzi, Camille Locht, Iver Heron, and Michael J. Brennan

1432 Seroepidemiology of Emerging Tickborne Infectious Diseases in a Northern California Community
Curtis L. Fritz, Anne M. Kjemtrup, Patricia A. Conrad, George R. Flores, Grant L. Campbell, Martin E. Schriefer, Dana Gallo, and Duc J. Vugia

1440 Relationship between Nasopharyngeal Colonization and the Development of Otitis Media in Children
Howard Faden, Linda Duffy, Raymond Wasielewski, Judy Wolf, Debra Krystofik, Ying Tung, and Tonawanda/Williamsville Pediatrics

1446 Interpretation of Restriction Fragment Length Polymorphism Analysis of *Mycobacterium tuberculosis* Isolates from a State with a Large Rural Population
Christopher R. Braden, Gary L. Templeton, M. Donald Cave, Sarah Valway, Ida M. Onorato, Kenneth G. Castro, Dory Moers, Zhenhua Yang, William W. Stead, and Joseph H. Bates

1453 Prevalence and Correlates of Antibody to Chlamydial Heat Shock Protein in Women Attending Sexually Transmitted Disease Clinics and Women with Confirmed Pelvic Inflammatory Disease
L. O. Eckert, S. E. Hawes, P. Wölner-Hanssen, D. M. Money, R. W. Peeling, R. C. Brunham, C. E. Stevens, D. A. Eschenbach, and W. E. Stamm

1459 Epidemiology of *Aspergillus* Infections in a Large Cohort of Patients Undergoing Bone Marrow Transplantation
Anna Wald, Wendy Leisenring, Jo-Anne van Burik, and Raleigh A. Bowden

1467 Iron Overload Alters Innate and T Helper Cell Responses to *Candida albicans* in Mice
Antonella Mencacci, Elio Cenci, Johan R. Boelaert, Paola Bucci, Paolo Mosci, Cristiana Fè d'Ostiani, Francesco Bistoni, and Luigina Romani

1477 Endogenous Interleukin-12 Regulates Acquired Resistance in Experimental Visceral Leishmaniasis
Henry W. Murray

1480 Increased *c-fos* Expression in the Brain during Experimental Murine Cerebral Malaria: Possible Association with Neurologic Complications
Naili Ma, Antony J. Harding, Roger Pamphlett, Geeta Chaudhri, and Nicholas H. Hunt

Concise Communications

1490 Cytomegalovirus Monitoring by Polymerase Chain Reaction of Whole Blood Samples from Patients Undergoing Autologous Bone Marrow or Peripheral Blood Progenitor Cell Transplantation
H. Hebart, A. Schröder, J. Löffler, T. Klingebiel, H. Martin, B. Wassmann, F. Gerneth, H. Rabenau, G. Jahn, L. Kanz, C. A. Müller, and H. Einsele

1494 Immunogenicity of Two Doses of Yeast Recombinant Hepatitis B Vaccine in Healthy Older Adults
Bruce G. Gellin, Richard N. Greenberg, Richard H. Hart, Joseph S. Bertino, Jr., David H. Stein, Maria A. Deloria, and Mary Lou Clements-Mann

1497 Dengue Virus Inhibits Human Hematopoietic Progenitor Growth In Vitro
Bernadette Murgue, Olivier Cassar, Martine Guigon, and Eliane Chungue

1502 Transmission of Human Immunodeficiency Virus Type 1 Resistant to Nevirapine and Zidovudine
Allison Imrie, Alexander Beveridge, William Genn, Jeanette Vizzard, David A. Cooper, and the Sydney Primary HIV Infection Study Group

1507 Decreased Short-Term Production of Tumor Necrosis Factor-α and Interleukin-1β in Human Immunodeficiency Virus–Seropositive Subjects
Henrik Ullum, Jette Victor, Terese L. Katzenstein, Jan Gerstoft, Peter C. Gøtzsche, Klaus Bendtzen, Peter Skinhøj, and Bente Klarlund Pedersen

1510 Molecular Analyses of Human Immunodeficiency Virus Type 1 V3 Region Quasispecies Derived from Plasma and Peripheral Blood Mononuclear Cells of the First Long-Term–Nonprogressing Mother and Child Pair
Bin Wang, Ying Chun Ge, Rafael Jozwiak, Wayne Bolton, Pamela Palasanthiran, John Ziegler, Joon Chang, Shi-Hua Xiang, Anthony L. Cunningham, and Nitin K. Saksena

1515 Antibody Response to *Arcanobacterium haemolyticum* Infection in Humans
Mats Nyman, Kishore R. Alugupalli, Stefan Strömberg, and Arne Forsgren

1519 An Investigation of Geographic Clustering of Repeat Cases of Gonorrhea and Chlamydial Infection in San Francisco, 1989–1993: Evidence for Core Groups
Jonathan M. Ellen, Nancy A. Hessol, Robert P. Kohn, and Gail A. Bolan

1523 Rapid Diagnosis of Respiratory *Chlamydia pneumoniae* Infection by Nested Touchdown Polymerase Chain Reaction Compared with Culture and Antigen Detection by EIA
Jens Boman, Annika Allard, Kenneth Persson, Mikael Lundborg, Per Juto, and Göran Wadell

1527 Etiology of Bloody Diarrhea in Bolivian Children: Implications for Empiric Therapy
John M. Townes, Robert Quick, Oscar Y. Gonzales, Miriam Linares, Esther Damiani, Cheryl A. Bopp, Suzanne P. Wahlquist, Lori C. Hutwagner, Erica Hanover, Eric D. Mintz, and Robert V. Tauxe, for the Bolivian Dysentery Study Group

1531 Infection of Human Monocytes with *Mycobacterium tuberculosis* Enhances Human Immunodeficiency Virus Type 1 Replication and Transmission to T Cells
Giorgio Mancino, Roberta Placido, Simona Bach, Francesca Mariani, Carla Montesano, Lucia Ercoli, Marek Zembala, and Vittorio Colizzi

1535 Estimation of the Annual Risk of Tuberculous Infection for White Men in the United States
Thomas M. Daniel and Sara M. Debanne

1538 Alterations to the Cell Wall of *Histoplasma capsulatum* Yeasts during Infection of Macrophages or Epithelial Cells
Linda Groppe Eissenberg, Stephen A. Moser, and William E. Goldman

1544 Atovaquone and Proguanil for the Treatment of Malaria in Brazil
Filomena E. C. de Alencar, Crispim Cerutti, Jr., Rui Rafael Durlacher, Marcos Boulos, Fabiana Piovesan Alves, Wilbur Milhous, and Lorrin W. Pang

Correspondence

1548 Nucleotide Sequence at Position 1081 of the Hemagglutinin-Neuraminidase Gene in the Mumps Virus Urabe Vaccine Strain
Chisato Mori, Tetsurou Tooriyama, Tadashi Imagawa, and Koichi Yamanishi

1549 Reply
Earl G. Brown, Kenneth Dimock, and Kathryn E. Wright

1550 **Books Received and Notice**

1551 **Reviewers of Volume 175**

1555 **Index to Volume 175**

Instructions for Authors

Volume Contents

IDSA Officers

Infectious Diseases Society of America

OFFICERS AND COUNCIL

P. Frederick Sparling, *President*
John E. Bennett, *President-Elect*
John Bartlett, *Vice President*
Donald Armstrong, *Past President*
Catherine M. Wilfert, *Secretary-Treasurer*

COUNCILLORS

Carol J. Baker
David N. Gilbert
John E. McGowan, Jr.
Philip A. Pizzo
Thomas G. Slama
Lucy S. Tompkins
Richard J. Whitley

PUBLICATIONS COMMITTEE

Elias Abrutyn (*Chair*)
Anne A. Gershon
David N. Gilbert
Philip A. Mackowiak
John E. McGowan, Jr.
Charles V. Sanders
Carmelita Tuazon
Sydney M. Finegold (*ex officio*)
Marvin Turck (*ex officio*)
Catherine M. Wilfert (*ex officio*)